March 13, 2007

Subject: Fisher Sand and Gravel Fluke Application

To All Interested Parties:

In January 2007 Fisher Sand and Gravel Inc. applied to this department to open a new 12.9-acre gravel operation about 4 miles south of Gallatin Gateway, off Gateway South Road.

Fisher would mine, crush, and stockpile approximately 75,000 cubic yards of gravel. An asphalt plant is also requested. The material would be used on a Montana Department of Highways construction project between Yellowstone Park and Big Sky which is scheduled for completion this summer. Truck traffic would leave the pit and turn south on Gateway South Road to its intersection with Highway 191. The trucks would then proceed south to the construction job.

Salvaged topsoil and overburden would be placed around the permit area. Final reclamation would be in the year 2010. The site would then be used for a pond and pasture.

The draft environmental assessment enclosed with this letter identifies and analyzes impacts of the project. It has been mailed to all parties that have shown an interest in the project. They include some local residents and the Gallatin County Commissioners.

Please read this draft environmental assessment or you may access it at http://www.deq.mt.gov/ea/opencut.asp. If you have any questions, concerns, or comments, you can:

- mail them to me at 1371 Rimtop Drive, Billings, MT 59105,
- fax them to 247-4440,
- e-mail me at jostephen@mt.gov., or
- call me at 406-247-4435.

All comments must be received by 5:00 p.m., Wednesday, March 28, 2007.

Thank you.

Sincerely,

Jo Stephen,
Reclamation Specialist
DEQ
1371 Rimtop Drive,
Billings, MT 59105

Enclosure

DRAFT ENVIRONMENTAL ASSESSMENT

Application for the Fluke Pit

This environmental assessment (EA) is required under the **Montana Environmental Policy Act (MEPA**). An EA functions to identify, disclose and analyze the impacts of an action, in this case operating a gravel pit over which the state must make a decision. MEPA sets no environmental standards even though it requires analysis of both the natural and human environment. This document may disclose many impacts that have no legislatively required standards or over which there is no regulatory authority. The state legislature has provided no authority in MEPA to allow DEQ (or any other state agency) to require conditions or impose mitigations on a proposed permitting action that are not included in the permitting authority and operating standards in the governing state law, such as the Opencut Mining Act, the Clean Air Act of Montana, or any other applicable state environmental regulatory law. Beyond that, a company may agree to voluntarily modify its proposed activities or accept permit conditions.

The state law that regulates gravel-mining operations in Montana is the **Opencut Mining Act**. This law and its approved rules place operational guidance and limitations on a project during its life, and provide for the reclamation of land subjected to opencut materials mining. This law requires that a bond, cash deposit or other financial instrument be submitted to the state to cover the complete costs of reclaiming the site to its approved, post-mining land use.

The permit decision cannot be based upon the popularity of the project, but upon whether or not the proponent has met the requirements of the Opencut Mining Act, pursuant rules, and other laws pertaining to his proposed actions.

SITE NAME: **Fluke** APPLICANT: **Fisher Sand & Gravel**

LOCATION**: SW of Sec 15, T3S R4E** COUNTY: **Gallatin**

PROPOSED ACTION: **Fisher Sand and Gravel proposes to mine and crush 75,000 cubic yards of gravel from a 12.9-acre site. An asphalt plant is also being requested. The proposed site is on a terrace just west the Gallatin River. The northern 6 acres of the proposed permit area would be mined and the southern 5+ acres would be used for the location of the crusher, stockpiles, and asphalt plant. An access road to the permit area would be built from Gateway South Road.**

The major use for this material would be for a Montana Department of Transportation highway construction project # NH 50-2(52)31 between Yellowstone Park and Big Sky on Highway 191, about 20 miles to the south. Truck traffic for this MDT job would turn south on Gateway South Road to its intersection with Highway 191 (approximately 3.5 miles) and then proceed southward on the highway.

Reclamation would be completed to a 6-acre wildlife pond and pasture land by June 2010. The reclamation bond is $17,035.

A: Significant Unavoidable Impacts B: Insignificant as a result of conditioned mitigation C: Insignificant as proposed
L: Long term Impacts S: Short Term Impacts

				POTENTIAL IMPACTS		
	A	B	C	L	S	EXPLANATION
PHYSICAL ENVIRONMENT						
1. TOPOGRAPHY			X	X		The site is on a flat, alluvial terrace about 30 feet above and 300 feet west a side channel of the Gallatin River. The topography slopes from the south southwest to the north northeast and drops about 10 feet over the 800-foot long permit distance. Culverts would be installed so the access road could cross the two branches of the Noble ditch. A field supply ditch running between the site and the Gallatin Floodplain area would not be disturbed. The mine pit would fill with groundwater leaving a permanent 6-acre wildlife pond feature.
2. GEOLOGY; Stability			X	X		The site's alluvium consists of recent gravels, cobbles and boulders that have washed down from the Madison and Gallatin Ranges. The mined alluvium would be mechanically altered and permanently removed from its present location. The majority of material would be used to overlay about 20 miles of Highway 191 between Yellowstone Park and Big Sky. No available gravel resources are located near the construction site. The site would be reclaimed to a stable condition.
3. SOILS; Quality, Distribution			X		X	Soils at the site are a Sudworth-Nesda rocky loam complex and are highly permeable. Topsoil and overburden depths are quite variable ranging from 0 to 24 inches. In general, the soil averages about 9 inches and the overburden averages 12 inches. Surface gravel is visible in some parts of the site. The site has been irrigated for hay production. Topsoil and some overburden salvage and replacement are required under the Opencut Act. In

				POTENTIAL IMPACTS		
	A	B	C	L	S	EXPLANATION
						reclaiming pond areas topsoil replacement is only required to the water line. Some excess topsoil from the mine area should be available for reclamation of the facility area. Salvage and replacement would result in minimal adverse impacts to this soil type. Average annual precipitation is between 15 and 19 inches.
4. WATER; Quality; Quantity; Distribution			X		X	No springs are visible on the site. A waste water ditch runs between the site and the Gallatin River flood plain. Two branches of the Noble ditch run to the west and would be crossed by the access road. Except for culverts in the Noble ditch, none of these water features would be impacted. The access road would be reduced in width but left after reclamation in a condition consistent with the post-mine land use. The closest surface water is the Gallatin River between 300 and 1,000 feet away to the east and about 20 feet lower in elevation. The site would drain toward the 6-acre pit area so runoff would be contained on-site and would not reach any surface water. Test pits were dug in November 2006. Groundwater was intercepted at about 8 feet. A Fluke property well drilled in July 1995 had a static water level of 10 feet when drilled. The 6-acre mine area would be excavated to a maximum depth of 15 feet and reclaimed to a wildlife pond. Any excavation conducted below the water table would be done with a track hoe. Fuel tanks would be installed in accordance with state and federal berming and spill containment guidelines. Asphalt solidifies around 150 degrees F. If any asphalt were to be spilled it would not migrate or contaminate groundwater. Asphalt truck beds are treated so the asphalt slips out easily and cleanly at the delivery point. The truck treatment area would be lined and then filled with sand to absorb any spilled material. The sand would then be removed and properly disposed of.

				POTENTIAL IMPACTS		
	A	B	C	L	S	EXPLANATION
						Operation of this pit and crusher would require about 2,000 gallons of water per day, or a little over a gallon per minute. It is unknown how much pond temperatures would increase during the summer months. Pond water is warmed to some degree by higher seasonal temperatures in the spring and summer. Ponds have different thermal layers and there is usually not much vertical mixing. The proposed post-mine pond would be up to 15 feet deep. Groundwater temperature is about 50 degrees as measured at Zoot Enterprises over the last 4 years. Flow is expected to be relatively great through the highly transmissive gravels. Studies of the effect of heating in gravel pit ponds (Ostrander and others, 1998; Harden Environmental, 1995) have shown that ponds typically have minimal impact on the heating of down gradient groundwater and that the small thermal gains (<1 degree C) measured in pit ponds are quickly dissipated. There would be no measurable adverse impacts to water quality or quantity from operating this pit.
5. AIR; Quality			X		X	Air quality standards are based upon the Clean Air Act of Montana and pursuant rules and is administered by the DEQ Air Resources Management Bureau (ARMB). DEQ has an Environmental Protection Agency (EPA) approved air quality program. Permits and permit conditions are established to promote compliance with all applicable air quality rules and standards. These rules and standards are designed to be protective of human health and the environment. The crusher and asphalt plants are permitted by the ARMB of DEQ. To control dust crushers are equipped with water spray bars. Asphalt plants are equipped with bag houses or a water scrubber system. Fugitive dust from the floor of the facility area would be controlled with the use of water trucks or possibly an environmentally-approved dust suppressant agent. The major contractor would use dust suppressant on South Gateway Road and would maintain it during the highway contract term in accordance with an

				POTENTIAL IMPACTS		
	A	B	C	L	S	EXPLANATION
						agreement with the county road department. Air quality impacts would be minimal.
6. UNIQUE, ENDANGERED, FRAGILE, or LIMITED environmental resources						There are no wetlands, unique, or endangered species on site. Although not seen on or near the site during inspections, bald eagles are prevalent up and down the Gallatin River Corridor. There is an ongoing study of the Gallatin River from Yellowstone Park to Spanish Creek to determine if the river is an outstanding resource water. The study area stops about 6 miles south of the proposed pit.
BIOLOGICAL ENVIRONMENT						
1. VEGETATION; quantity, quality, species			X		X	This site is an irrigated pasture/hayland. It was plowed and planted with grasses adaptable to irrigation including mountain brome. The proposed post-mine wildlife pond feature would permanently remove forage grasses from about 6 acres of irrigated field. The facilities area would suffer minimal impact because of the short duration of the project and limited size and disturbance. The portion of the site not occupied by water in the pond would be reclaimed by 2010 to pasture with intermediate wheatgrass, Brogowski rye grass, and alfalfa. Water tolerant species would be planted around the edge of the pond, if they do not naturally invade the area, to provide habitat for wildlife. Reclamation to a pond would result in a slight decrease in forage productivity. The pond would add a calm water habitat similar to an oxbow area, which is different from the Gallatin River riparian habitat nearby.
2. TERRESTRIAL, AVIAN, and AQUATIC; species and habitats			X		X	Deer, waterfowl, and raptors are the major species inhabiting the area. The pond would allow different species to use the area including animals that do not usually occupy the rapid-flowing river. It would provide habitat akin to an oxbow in a maturing river system. The Montana Natural Heritage Program has records for a great blue heron rookery with 12 nests located approximately a half mile south of the proposed mine site. The rookery is still active. Mining is proposed to commence in early April at approximately the same time the nests would be in use. No trees would

				POTENTIAL IMPACTS		
	A	B	C	L	S	EXPLANATION
						be impacted by the proposed operation. Mining would not disturb any heron feeding grounds in the area. It is unknown if the mining noise or activity would disturb the birds, but the landowner stated that they have worked with chain saws and farm equipment near the rookery with no apparent adverse impacts. No other species of concern were identified. Mining would have minimal impact because of the relatively small area that would be disturbed and because of the short timeframe of mining activity.
3. AGRICULTURE; grazing, crops Production			X		X	Mining would result in a minimal short term reduction of vegetation and permanent reduction of 6 acres of pasture.
HUMAN ENVIRONMENT						
1. SOCIAL; structures and mores			X		X	
2. CULTURAL uniqueness/diversity			X		X	
3. POPULATION; quantity/diversity			X		X	At this time about 6 homes are located along Gateway South Road in the 3.5 miles between the proposed pit and the road's intersection with Highway 191 to the south.
4. HOUSING; quantity/distribution			X		X	
5. HUMAN HEALTH & SAFETY			X		X	There would be a short term increase in truck traffic on Gateway South Road and Highway 191 south through the canyon to the job site for the duration of the construction.
6. COMMUNITY & PERSONAL INCOME			X		X	There may be a minimal loss of income from tourists during construction. Road reports on the radio advertise construction projects. Some tourists may take other routes to the Park, such as up the Madison Valley.
7. EMPLOYMENT; quantity, distribution			X		X	This is a short term project and would have minimal impact on employment. A few locals sometimes are hired as flag people.
8. TAX BASE; state/local tax revenue			X		X	
9. GOVERNMENT SERVICES; demand			X		X	
10. INDUSTRIAL, COMMERCIAL and AGRICULTURAL activities			X		X	

				POTENTIAL IMPACTS		
	A	B	C	L	S	EXPLANATION
11. HISTORICAL and ARCHAEOLOGICAL			X		X	A walkover of the area did not reveal any artifacts or signs of occupation. No signs were evident at depth in the previously disturbed area along the ditches and roadway. If during operations resources were to be discovered, activities would be halted, or temporarily moved to another area in the pit until SHPO was contacted and the importance of the find was determined.
12. AESTHETICS			X		X	Several homes are located more than 1,000 feet to the north of the site and access road. Two other homes are located across the road and about 1,000 feet from the proposed pit. Almost all of the truck traffic would go by these two homes, and about four others located along the county road on the way south to Highway 191. Then the truck traffic would continue south on 191 to the construction job. Traffic for this job would not go north through Gallatin Gateway. Hauling out the 75,000 yards of material (primarily asphalt) from the mine site would average about 80 truck trips or average daily traffic (ADT) per day. That is 40 loaded trucks and 40 empty returns. However this number would fluctuate based upon what was actually occurring at the highway job site to the south. The most traffic would occur while hauling asphalt which is scheduled to take 3 to 4 weeks. The county road department must issue an access permit for this pit. Through that permit dust suppressant and road maintenance responsibilities with Prince, Inc., the principal contractor of the MDT job, would be confirmed. Hours of operation of the crusher would be 24 hours per day, 9 days on and 5 days off. Hauling and asphalt hours would generally follow Montana Department of Transportation guidelines, which would be from 6 a.m. to 9 p.m. Major activity on the construction job is scheduled from April to August 2007. The crusher would operate during the first part of that construction period. Noise and odor from the asphalt plant would probably be from the middle to the end of that time frame.

				POTENTIAL IMPACTS		
	A	B	C	L	S	EXPLANATION
						If the construction period were to change, the actual months of construction would be different but the lengths of time for the crusher and road construction would be very similar. After road construction, if there is any excess material, it may be sold and removed during normal business hours of 7 a.m. to 7 p.m. 5 days a week.
13. ENVIRONMENTAL PLANS and GOALS; local and regional			X		X	
14. DEMANDS on ENVIRON-MENTAL RESOURCES of land, water, air and energy			X		X	
15. TRANSPORTATION; networks and traffic flows			X		X	This material is for reconstruction or overlay of Highway 191 between the Big Sky turnoff and the Yellowstone Park boundary about 20 miles to the south. It is the major route into the Park and to West Yellowstone in this part of the state. There would be heavy truck traffic on the county road and the highway for about 4 months.

REGULATORY IMPACT ON PRIVATE PROPERTY: The analysis done in response to the Private Property Assessment Act indicates no impact. The Department does not plan to deny the application or impose conditions that would restrict the use of private property so as to constitute a taking.

PUBLIC INVOLVEMENT: Landowner, Natural Heritage Program, State Historic Preservation Office

OTHER GROUPS OR AGENCIES CONTACTED OR WHICH MAY HAVE OVERLAPPING JURISDICTION:

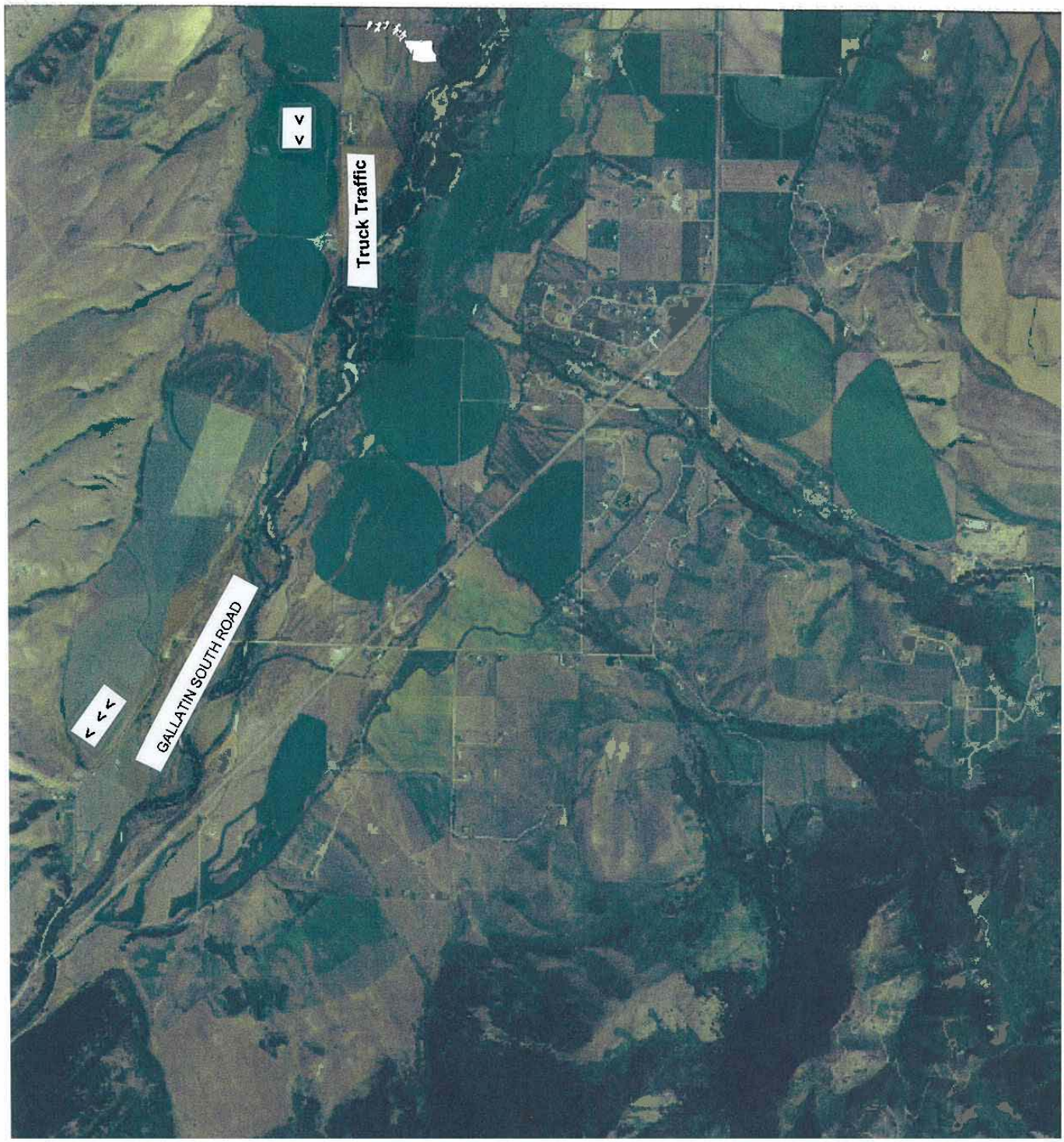
Air Resources Management Bureau, Mining Safety and Health, Gallatin County Commissioners, Gallatin County Weed Board, Gallatin County Road Department

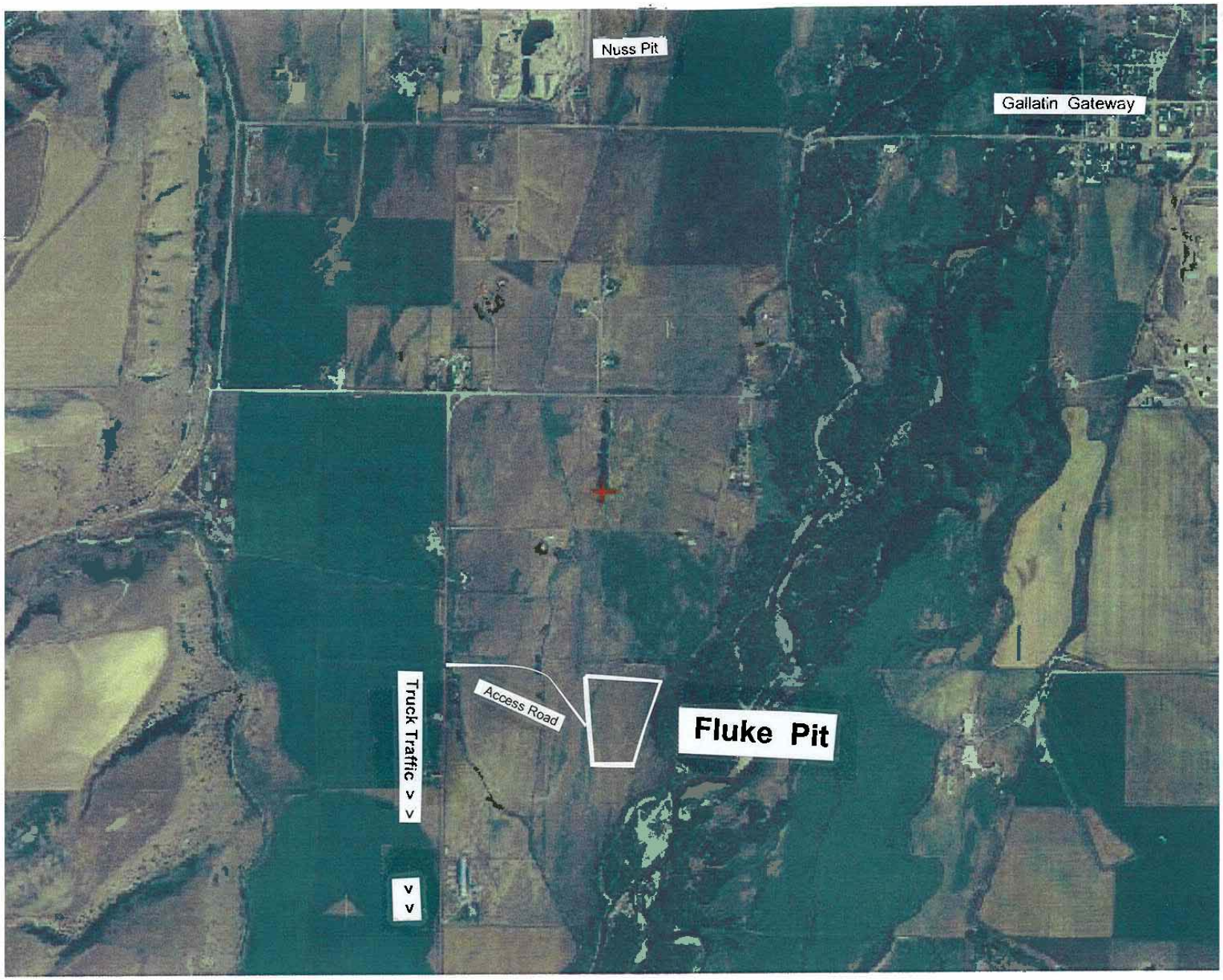
ALTERNATIVES CONSIDERED: Denial

RECOMMENDATIONS CONCERNING PREPARATION OF AN EIS: Unnecessary, No Significant Impacts

Prepared by Jo Stephen, 3/07

FLUKE PIT

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